

REMARKS

The Office Action mailed October 16, 2003, has been carefully considered. In response to the Office Action, Applicants have amended the application. Applicants request that the Examiner consider the following remarks, and then pass the application to allowance.

Drawing Corrections

The drawing figures have been corrected in accordance with the Examiner's suggestions. Specifically, the designation Prior Art has been added to FIGS. 1 and 2.

Changes in the Abstract

The Abstract has been amended in accordance with the Examiner's suggestions.

Claim Objections

The claims have been amended as necessary to address the objections in the Office Action. Where applicable, the Examiner's suggested changes, which are gratefully acknowledged, have been adopted.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 2 and 3 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claim 2 has been amended to clarify, without narrowing its breadth, that the two elements—the means for applying a potential difference, and the control means—each supply potential differences such that the value of the electric field in the “vicinity of the first electrode is greater than the value which would be due to the potential difference alone . . .” Claim 3 has been amended to make a similar clarification.

Rejections Under 35 U.S.C. §§ 102(b) and 103(a)

Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by Tjaden et al. (U.S. Pat. No. 5,374,868). Claims 1 – 4, 6 – 12, 14, 24 – 26, and 29 were rejected under

35 U.S.C. § 102(b) as anticipated by Lees (U.S. Pat. No. 3,671,789). Claims 5, 13, 15 – 19, 27, 28, 30 and 31 were rejected under 35 U.S.C. § 103(a) as unpatentable over Lees in view of Konishi (U.S. Pat. No. 5,982,091).

Claims 1 and 7 have been amended to recite the arrangement wherein

the first electrode substantially totally occupies the space situated between the second electrode and the portion of said means forming modulation electrode that is the most distant from the second electrode.

Similarly, Claims 10, 24 and 25, have been amended to recite the arrangement wherein

the cathode electrode substantially totally occupies the space situated between the anode electrode and the portion of said means forming modulation electrode that is the most distant from the anode electrode

The remaining claims all depend from these amended claims. The applied references fail to disclose or suggest these claimed features. Specifically, in Lees, the planar electrode 20 and the lower part of the rod-like conductors 16 are located under the control film 22. In Tjaden, the feature comprising the tips 13 and the conductive material layer 25 is mainly under the gate 15.

The presently claimed invention avoids placement of the first electrode or cathode (and the layer of emissive material) on the bottom of deep trenches realized in the means forming modulation electrode, which is a drawback discussed in the specification (see page 4, lines 14-17). These features are neither taught nor suggested by the applied references.

Newly-Added Claims

Newly added Claims 34 and 35 define further novel features of the invention relating to configurations of the first electrode (Claim 34) and the cathode electrode (Claim 35).

Conclusion

In view of the preceding discussion, Applicants respectfully urge that the claims of the present application define patentable subject matter and should be passed to allowance. Such allowance is respectfully solicited.

If the Examiner believes that a telephone call would help advance prosecution of the present invention, the Examiner is kindly invited to call the undersigned attorney.

Respectfully submitted,

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